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Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					
(use as many sheets as necessary)					
Sheet	1	of	1	Application Number	10/761,918
				Filing Date	01/20/2004
				First Named Inventor	Harry A. ATWATER et al.
				Group Art Unit	1764 (76)
				Examiner Name	Unassigned Duy-Vu D-co
				Attorney Docket Number	047071-0107

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	B1	5,013,681		GODBEY et al.	05-07-1991	
	B2	5,217,564		BOZLER et al.	06-08-1993	
	B3	5,391,257		SULLIVAN et al.	02-21-1995	
	B4	5,637,187		TAKASU et al.	06-10-1997	
	B5	5,641,381		BAILEY et al.	06-24-1997	
	B6	5,710,057		KENNEY	01-20-1998	
	B7	6,020,252		ASPAR et al.	02-01-2000	
	B8	6,103,597		ASPAR et al.	08-15-2000	
	B9	6,211,738		SAKAGUCHI et al	04-24-2001	
	B10	6,242,324		KUB et al.	06-05-2001	
	B11	6,323,108		KUB et al.	11-27-2001	
	B12	6,328,796		KUB et al.	12-11-2001	
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	B19	2005/0032330		GHYSELEN et al.	02-10-2005	
	B20	6,867,067		GHYSELEN et al.	03-15-2005	
	B21	6,908,828		LETERTRE et al.	06-21-2005	

U.S. PATENT APPLICATIONS						
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	B22	10/784,586		ATWATER et al.	02/23/2004	
	B23	11/004,808		ATWATER et al.	12/07/2004	
	B24	11/004,948		ATWATER et al.	12/07/2004	

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	B25	JP	03-270220	FUJITSU LTD.	02-12-1991	Abst.

NON PATENT LITERATURE DOCUMENTS					
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	B26	WELDON et al., "Mechanism of Silicon Exfoliation Induced by Hydrogen/Helium Co-Implantation," Applied Physics Letters, Vol. 73, No. 25, December 21, 1998, pgs. 3721-3723.			

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Sheet 1 of 7					

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XJ	A1	5,882,987		SRIKRISHNAN	08/26/1997	
	A2	6,150,239		GOESSELE et al.	09/30/1998	
	A3	6,346,458		BOWER	12/30/1999	
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	A65	6,504,091		HISAMATSU et al.	1/2003	
	A66	5,231,047		OVSHINSKY et al.	7/1993	

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DD	A15	EP	0 060 103			04/17/1985	
DD	A16	WO	01/03172			01/11/2001	

NON PATENT LITERATURE DOCUMENTS						
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JL	A17	CURTIS et al., "Integration of the UOP/HYDRO MTO Process into Ethylene Plants," 10 <sup>th</sup> Ethylene Producers' Conference, 1998, pp. 54-85				
JL	A18	BETT et al., III-V Compounds for Solar Cell Applications, Appl. Phys. A, 1999, pp. 119-129, Vol. 69, Springer-Verlag (published online: 24 June 1999)				
JL	A19	BRUEL et al., Smart-Cut: A New Silicon On Insulator Material Technology Based on Hydrogen Implantation and Wafer Bonding, March 1997, pp. 1636-1641, Vol. 36, Jpn. J. Appl. Phys				

Examiner Signature	<i>JL</i>	Date Considered	<i>5/10/06</i>
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Date Submitted: 1/6/05				Filing Date	01/20/2004
(use as many sheets as necessary)				First Named Inventor	Harry A. ATWATER et al.
				Group Art Unit	1764
				Examiner Name	Unassigned
Sheet	2	of	7	Attorney Docket Number	047071-0107

U.S. PATENT DOCUMENTS						
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NON PATENT LITERATURE DOCUMENTS						
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JL	A20	CHENG et al., Electron Mobility Enhancement in Strained-Si n-MOSFETs Fabricated on SiGe-on-Insulator (SGOI) Substrates, IEEE Electron Device Letters, July 2001, pp. 321-323, Vol. 22, No. 7				
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JL	A22	GEORGAKILAS et al., Wafer-scale Integration of GaAs Optoelectronic Devices with Standard Si Integrated Circuits Using a Low-Temperature Bonding Procedure, Applied Physics Letters, Dec. 2002, pp. 5099-5101, Vol. 81, No. 27, American Institute of Physics [Downloaded 19 Oct. 2004]				
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JL	A24	GÖSELE et al., Semiconductor Wafer Bonding. Annu. Rev. Mater. Sci., 1998, pp. 215-241, Vol. 28				
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JL	A26	TONG et al., "Layer Splitting Process in Hydrogen-Implanted Si, Ge, SiC, and Diamond Substrates," Appl. Phys. Lett., Vol. 70, No. 11, March 17, 1997, pp. 1390-1392.				
JL	A27	HUANG et al., Electron and Hole Mobility Enhancement in Strained SOI by Wafer Bonding, IEEE Transactions on Electron Devices, Sept. 2002, pp. 1566-1571, Vol. 49, No. 9				

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				<b>First Named Inventor</b>	Harry A. ATWATER et al.
				<b>Group Art Unit</b>	1764
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jj	A28	LANGDO et al., Strained Si on Insulator Technology: From Materials to Devices, Solid-State Electronics, 2004, pp. 1357-1367, Vol. 48, Elsevier Ltd.			
jj	A29	LEROY et al., Controlled Surface Nanopatterning with Buried Dislocation Arrays, Surface Science, 2003, pp. 211-219, Vol. 545, Elsevier B.V.			
jj	A30	MA et al., Solid-State Reaction-Mediated Low-Temperature Bonding of GaAs and InP Wafers to Si Substrates, Appl. Phys. Lett., Feb. 1994, pp. 772-774, Vol. 64, No. 6, American Institute of Physics			
jj	A31	MALEVILLE et al., Smart-Cut® Technology: From 300 mm Ultrathin SOI Production to Advanced Engineered Substrates, Solid-State Electronics, 2004, pp. 1055-1063, Vol. 48, Elsevier Ltd.			
jj	A32	MORRAL et al., InGaAs/InP Double Heterostructures on InP/Si Templates Fabricated by Wafer Bonding and Hydrogen-Induced Exfoliation, Applied Physics Letters, Dec. 2003, pp. 5413-5415, Vol. 83, No. 26, American Institute of Physics			
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jj	A35	TONG et al., Hydrophobic Silicon Wafer Bonding, Appl. Phys. Lett., Jan. 1994, pp. 625-627, Vol. 64, No. 5, American Institute of Physics			

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JD	A36	TONG et al., A "Smarter-Cut" Approach to Low Temperature Silicon Layer Transfer, Appl. Phys. Lett., Jan. 1998, pp. 49-51, Vol. 72, No. 1, American Institute of Physics					
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JD	A40	TRACY et al., Germanium-on-Insulator Substrates by Wafer Bonding, Journal of Electronic Materials, 2004, pp- 886-892, Vol. 33, No. 8					
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g d	A44	BRUEL M., Application of Hydrogen Ion Beams to Silicon on Insulator Material Technology, Nuclear Instruments and Methods in Physics Research B, 1996, pp. 313-319, Vol. 108, Elsevier Science B.V.				
g d	A45	KIM et al., Heterogeneous Silicon Integration by Ultra-High Vacuum Wafer Bonding, Journal of Electronic Materials, 2003, pp. 849-854, Vol. 32, No. 8				
g d	A46	LAGNADO et al., Integration of Si and SiGe with Al <sub>2</sub> O <sub>3</sub> (sapphire), Microelectronic Engineering, 2001, pp. 455-459, Vol. 59, Elsevier Science B.V.				
g d	A47	TARASCHI et al., Strained Si, SiGe, and Ge On-Insulator: Review of Wafer Bonding Fabrication Techniques, Solid-State Electronics, 2004, pp. 1297-1305, Vol. 48, Elsevier Ltd.				
g d	A48	WIEGAND et al., Wafer Bonding of Silicon Wafers Covered with Various Surface Layers, Sensors and Actuators, 2000, pp. 91-95, Vol. 86, Elsevier Science B.V.				
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g d	A50	ZAHLER et al., Wafer Bonded Ge/Si Heterostructures for Photovoltaic Applications, Presentation, MRS 2002 Fall Meeting, 16 pages, (11/2002)				
g d	A51	ZAHLER et al., Wafer Bonded Ge/Si Heterostructures for Photovoltaic Applications, (Presentation), Electronic Materials Conference 2002, 16 pages				

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Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/761,918
Date Submitted: 1/6/05				Filing Date	01/20/2004
(use as many sheets as necessary)				First Named Inventor	Harry A. ATWATER et al.
				Group Art Unit	1764
				Examiner Name	Unassigned
Sheet	6	of	7	Attorney Docket Number	047071-0107

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			

FOREIGN PATENT DOCUMENTS							
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NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.					T <sup>6</sup>
90	A52	ZAHLER et al., Wafer Bonded Ge/Si Heterostructures for Photovoltaic Applications, (Abstract and Presentation), MRS 2002 Spring Meeting (04/2002)					
1	A53	ZAHLER J.M., Materials Integration by Wafer Bonding and Layer Transfer, (Presentation), 13 pages, MRS 2004 Spring Meeting (04/2004)					
1	A54	ZAHLER et al., The Role of H in the H-Induced Exfoliation of GE Films, (Abstract and Presentation), MRS 2004 Spring Meeting, 16 pages (04/2004)					
1	A55	ZAHLER et al., Wafer Bonded Epitaxial Templates for GaAs/Si Heterostructures, (Abstract and Presentation), MRS 2003 Spring Meeting, 16 pages, (04/2003)					
1	A56	ZAHLER et al., Wafer Bonded Epitaxial Templates for GaAs/Si and InP/Si Heterostructures, (Presentation), MRS 2003 Fall Meeting, 15 pages, (11/2003)					
1	A57	ZAHLER et al., Wafer Bonding Processes for Ultrahigh Efficiency Photovoltaic Applications, (Abstract and Presentation), MRS 2001 Fall Meeting, (11/2001)					
1	A58	ZAHLER et al., GE Layer Transfer to Si for Photovoltaic Applications, (Presentation), 14 pages, MRS 2001 Spring Conference, (04/2001)					
90	A59	ZAHLER et al., Wafer Bonding and Layer Transfer Processes for A 4-Junction Solar Cell, (Presentation) 29 <sup>th</sup> IEEE Photovoltaic Specialists Conference, New Orleans, USA, (05/2002)					

Examiner Signature	10-	Date Considered	5/10/06
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Date Submitted: 1/6/05				<b>Filing Date</b>	01/20/2004
(use as many sheets as necessary)				<b>First Named Inventor</b>	Harry A. ATWATER et al.
Sheet	7	of	7	<b>Group Art Unit</b>	1764
				<b>Examiner Name</b>	Unassigned
				<b>Attorney Docket Number</b>	047071-0107

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<i>JL</i>	A60	ZAHLER et al., Ge/Si Wafer Bonded Epitaxial Templates for GaAs/Si Heterostructures, (Abstract), MRS 2002 Fall Meeting, (11/2002)			
<i>JL</i>	A61	MORRAL et al., Bonding and Layer Transfer Process of InP on Silicon for the Elaboration of the Bottom Double Heterostructure of 4-Junction High Efficiency Solar Cells, (Abstract), MRS 2002 Fall Meeting, (11/2002)			
<i>JL</i>	A62	MORRAL et al., Assessment of Optical and Structural Properties of III-V Semiconductors Grown on InP/Si and Ge/Si Wafer Bonded Epitaxial Templates with Application to a Four-Junction Solar Cell, (Abstract), MRS 2003 Spring Meeting, (04/2003)			
<i>JL</i>	A63	MORRAL et al., Electrical and Structural Characterization of the Interface of Wafer Bonded InP/Si, MRS 2003 Spring Meeting, (04/2003)			
<i>JL</i>	A64	MORRAL et al., The Role of Hydrogen in H-Induced Exfoliation and Layer Transfer on InP, (Abstract), MRS 2004 Spring Meeting, (04/2004)			

Examiner Signature	<i>JL</i>	Date Considered	<i>5/10/04</i>
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